

### Exhibit 3

#### Part II: Activities of the Broker-Dealer Operator and its Affiliates

##### Item 5: Other Products and Services

- a. Does the Broker-Dealer Operator offer Subscribers any products or services for the purpose of effecting transactions or submitting, disseminating, or displaying orders and trading interest in the NMS Stock ATS (e.g., algorithmic trading products that send orders to the ATS, order management or order execution systems, data feeds regarding orders and trading interest in, or executions occurring on, the ATS)?

Yes  No

If yes, identify the products or services offered, provide a summary of the terms and conditions for use, and list here the applicable Item number in Part III of this form where the use of the product or service is explained. If there is no applicable Item in Part III, explain the use of the product or service with the ATS here.

The ATS offers a market data feed (the "IQX Data Feed") that disseminates all eligible orders that Subscribers submit to ~~the Discrete Bid/Offer Matching Processes~~ ASPEN (as ~~defined~~ discussed in Part III, Item 7). The IQX Data Feed only displays orders that Subscribers choose to display (~~"Displayed Orders"~~).

Orders eligible to be ~~Displayed Orders~~ displayed are: (1) ~~Limit Orders, including ALO Orders;~~ and (2) Primary Peg Orders, ~~including Limit Orders and Primary Peg Orders also may be designated as add liquidity only orders ("ALO Orders;").~~ For more information on ~~Order Types in the Discrete Bid/Offer Matching Processes~~ ATS' order types and order type modifiers, please see Part III, Item 7. The ATS will display Limit Orders and Primary Peg Orders at one price variation less aggressive than the price of contra-side interest displayed inside of the ATS or as part of the National Best Bid or Offer ("NBBO") (whichever is lower) where such orders would otherwise lock or cross displayed contra-side interest inside the ATS or as part of the ~~"NBBO"~~ as determined by the SIP and/or SRO proprietary data feeds.

Orders designated by a Subscriber to interact with other orders in a Hosted Pool, including orders designated to interact first with other orders in a Hosted Pool and then with orders outside the Hosted Pool, are not eligible to be ~~Displayed Orders~~ displayed orders.

Subscribers and non-Subscribers can receive the IQX Data Feed ("IQX Data Feed Recipients"). Non-Subscribers that receive the IQX Data Feed include buy-side firms, banks, and National Securities Exchanges. The IQX Data Feed is provided to IQX Data Feed Recipients through Pico. The ATS does not charge IQX Data Feed Recipients for the receipt of the IQX Data Feed. Pico, however, charges may charge a telecommunications/communications fee of \$500 per month to receive the IQX Data Feed that IQX Data Feed Recipients are responsible for paying. Additional information regarding the IQX Data Feed can be found in response to Part III, Item 15.

- b. If yes to Item 5(a), are the terms and conditions of the services or products required to be identified in Item 5(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- c. Does any Affiliate of the Broker-Dealer Operator offer Subscribers, the Broker-Dealer Operator, or both, any products or services for the purpose of effecting transactions or submitting, disseminating, or displaying orders or trading interest in the NMS Stock ATS?

Yes  No

If yes, identify the products or services offered, provide a summary of the terms and conditions for use, and list here the applicable Item number in Part III of this form where the use of the product or service is explained. If there is no applicable item in Part III, explain the use of the product or service with the ATS here.

- d. If yes to Item 5(c), are the terms and conditions of the services or products required to be identified in Item 5(c) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 6: Activities of Service Providers

- a. Does any employee of the Broker-Dealer Operator or its Affiliate that services both the operations of the NMS Stock ATS and any other business unit or any Affiliate of the Broker-Dealer Operator ("shared employee") have access to confidential trading information on the NMS Stock ATS?

Yes  No

If yes, identify the business unit, Affiliate, or both that the shared employee services, and provide a summary of the role and responsibilities of the shared employee at the ATS and the business unit, Affiliate, or both that the shared employee services.

**Answer:** The parent of IntelligentCross, Imperative Execution Inc. ("Imperative Execution"), is in the business of developing and licensing the technology that underlies the ATS platform operated by IntelligentCross. Imperative Execution licenses the technology underlying the ATS platform to IntelligentCross pursuant to an expense sharing agreement between IntelligentCross and Imperative Execution. Imperative Execution also develops smart order routing and other technology that it licenses to broker-dealers; IntelligentCross does not license such technology.

There are certain employees of Imperative Execution ("Shared Employees") that are IntelligentCross registered persons with FINRA ("Registered Persons"). Such Shared Employees have access to Subscriber Confidential Trading Information (as defined in

Part II, Item 7.a), as the only business line of IntelligentCross is that of operating the ATS. Certain Shared Employees of Imperative Execution who are not Registered Persons have access to confidential trading information of the ATS under the supervision of an IntelligentCross Registered Person.

Listed below are the categories of Shared Employees that have access to Subscriber Confidential Trading Information along with their role at Imperative Execution:

- (1) Senior Management/Supervisors – Shared Employees acting in a supervisory or oversight capacity have access to Subscriber confidential trading information relating to the ATS. Certain of these Shared Employees, among other responsibilities, have supervisory responsibilities reasonably designed to ensure that the ATS operates as intended. Certain of these Shared Employees also act in management roles with respect to Imperative Execution and provide strategic oversight of the development and licensing of the routing and other technology that it licenses to broker-dealers.
  - (2) Legal/Regulatory/Compliance – Shared Employees in the Legal, Regulatory and Compliance Departments are involved in providing support with respect to regulatory requirements of the businesses of Imperative Execution and IntelligentCross, including the operation of the ATS. These Shared Employees provide such support by, among other functions, responding to regulatory inquiries. In the course of performing such functions and generally providing support to the ATS, these Shared Employees may have access, on an as-needed basis, to Subscriber Confidential Trading Information.
  - (3) Production Support/Market Operations – Shared Employees within these groups include developers, systems engineers, and network engineers for Imperative Execution (with respect to the development of routing and other technology) and for IntelligentCross (with respect to support of the ATS). They are responsible for developing, operating, and supporting the coding, systems infrastructure, and network infrastructure that supports the ATS to ensure stability and continued functionality and are also responsible for developing, testing, and implementing additional functionalities for the ATS as needed. Certain of these Shared Employees have access to the real-time production environment for the ATS. As a result and in order to support the operation and infrastructure of ATS, these Shared Employees are able to access Subscriber Confidential Trading Information.
  - (4) Quantitative Research – Shared Employees within this group include personnel who provide research and analyze data relating to, and impacting the operation of, the ATS. Certain of these Shared Employees also support Imperative Execution by developing and supporting the products offered by Imperative Execution. In the course of their duties, these Shared Employees may have access to Subscriber Confidential Trading Information.
- b. Does any entity, other than the Broker-Dealer Operator, support the services or functionalities of the NMS Stock ATS ("service provider") that are required to be explained in Part III of this form?

Yes  No

If yes, both identify the service provider and provide a summary of the role and responsibilities of the service provider in response to the applicable Item number in Part III of this form, as required. List the applicable Item number here. If there are services or functionalities that are not applicable to Part III, identify the service provider, the services and functionalities, and also provide a summary of the role and responsibilities of the service provider here.

**Answer:**

The parent and sole member of IntelligentCross, Imperative Execution<sub>2</sub>, is in the business of developing and licensing the technology that underlies the ATS platform operated by IntelligentCross. Imperative Execution licenses such technology to IntelligentCross pursuant to an expense sharing agreement between IntelligentCross and Imperative Execution. ~~Please see Part III, Item 11 for additional information regarding the functions of Imperative Execution.~~

Pico Quantitative Trading ("Pico") is the ATS's managed co-location and network provider. Pico provides networking services and on-site assistance in the data center where the ATS's equipment is hosted. Subscribers may connect to Pico in order to establish connectivity with IntelligentCross (or may connect through other network service providers that have a presence in NY4). Further information on Pico is contained in Part III, Item 6.

Additionally, as referenced in Part III, Item 22, IntelligentCross has entered into clearing agreements with Instinet, LLC ("Clearing Firm"), which is a FINRA and NYSE member firm and a member of the National Securities Clearing Corporation, to provide for clearance and settlement of transactions executed on the ATS.

The ATS has contracted with several consultants ("Consultants"), including ~~IntelligentCross's~~ IntelligentCross' Chief Compliance Officer and Financial and Operations Principal ("FINOP") who are Registered Persons with the Broker-Dealer Operator and not employees of Imperative Execution or IntelligentCross.

- c. If yes to Item 6(b), does the service provider, or any of its Affiliates, use the NMS Stock ATS services?

Yes  No

If yes, identify the service provider, or the Affiliate as applicable, and the ATS services that the service provider or its Affiliates use.

Instinet, LLC, is a subscriber to the ATS and provides clearance and settlement of transactions executed on the ATS.

- d. If yes to Item 6(c), are the services that the NMS Stock ATS offers and provides to the entity required to be identified in Item 6(c) the same for all Subscribers?

Yes  No

If no, identify and explain any differences.

Item 7: Protection of Confidential Trading Information

- a. Describe the written safeguards and written procedures to protect the confidential trading information of Subscribers to the NMS Stock ATS, including:
- i. written standards controlling employees of the ATS that trade for employees' accounts; and
  - ii. written oversight procedures to ensure that the safeguards and procedures described above are implemented and followed.

**Answer:** IntelligentCross has implemented written safeguards and procedures designed to protect the confidential trading information of its Subscribers.

Access to Confidential Trading Information

~~Preliminarily,~~

IntelligentCross notes that the operation of the ATS is the sole activity of the broker-dealer and IntelligentCross does not have any other business units. As such, all Shared Employees and certain Imperative Execution employees are responsible for the operation of the ATS or for the ATS's compliance with ~~Reg-Regulation~~ ATS or other applicable rules. In accordance with the provisions of Rule 301(b)(10), a Series 24 registered supervisor of IntelligentCross ensures that the ATS restricts access to Subscriber confidential trading information, which includes Subscribers' real time and historical orders and executions related to the ATS ("Subscriber Confidential Trading Information"), to Shared Employees and certain Imperative Execution employees who are operating the ATS or responsible for its compliance with ~~Reg-Regulation~~ ATS or any other applicable rules. Subscriber Confidential Trading Information shall not include information displayed through the IQX Data Feed. Determinations regarding granting access to Subscriber Confidential Trading Information are ~~completed~~made on a case-by-case basis. In making such determinations, the ATS considers the function of the Shared Employees, Imperative Execution employees and the Consultants and the type of Subscriber Confidential Trading Information being accessed. Individuals with access to Subscriber Confidential Trading Information are only authorized to use such information for its intended purpose and cannot disseminate or give such information to anyone not authorized to receive that information.

Those individuals responsible for the operation of the ATS have controlled access via unique login credentials to view a Subscriber's orders and trades in the ATS systems. If an order has been made available to IntelligentCross, it resides on the IntelligentCross server, but such data is only accessible by IntelligentCross operations personnel or Imperative Execution personnel as supervised by IntelligentCross Registered Persons. IntelligentCross requires such personnel to understand the authorized uses of such

information and requires such personnel to acknowledge, in the form of an attestation, this understanding. Personnel undergo annual compliance training that includes materials related to protecting confidential trading information.

Requests for access to real-time Subscriber Confidential Trading Information must be approved by the CEO/COO of the ATS or their designee. The requests must be for individuals -involved in the operation or compliance functions of the ATS.

IntelligentCross conducts at least quarterly as needed reviews of the individuals that have access to Subscriber Confidential Trading Information -to ensure its continued compliance with Rule 301(b)(10). As part of the review, IntelligentCross confirms that individuals with access to Subscriber Confidential Trading Information continue to have a valid need to access such information.

IntelligentCross and Imperative Execution maintain information barriers to separate employees, consultants, and systems with access to Subscriber Confidential Trading Information of the ATS from those not permitted to access such information. These information barriers serve as controls to protect Subscriber Confidential Trading Information. Shared Employees and consultants receive periodic training and periodic guidance regarding the proper use of Subscriber Confidential Trading Information and that Subscriber Confidential Trading Information may only be used with respect to the support and operation of the ATS.

IntelligentCross protects against unauthorized access to or use of Subscriber Confidential Trading Information by use of a password system. Login credentials and passwords are required to gain access to systems containing Subscriber Confidential Trading Information. Passwords are required to be changed periodically and are disabled for terminated individuals or those no longer requiring access. The ATS does not maintain physical separation barriers.

With respect to the ATS's service provider Pico, Pico employs a dedicated, segregated management environment to provide secure access for management of customer and customer facing systems. The environment is protected via a defense in-depth strategy, utilizing a combination of firewalls, network access controls, intrusion detection systems and 2-factor authentication. Customer systems and networks utilize access control lists enforcing the appropriate segmentation and prevention of unauthorized access or data exfiltration. Controls and their effectiveness are actively monitored by a dedicated information security group utilizing a Security Information Event Management system (SIEM), ensuring deviations or anomalies are detected, alerted and reported in a timely manner.

With respect to Instinet, the ATS's clearing provider, it is a broker dealer that is subject to the various rules and requirements that broker-dealers adhere to as part of their day-to-day operations. IntelligentCross has an agreement with Instinet that contains standard confidentiality provisions that further protect Subscriber Confidential Trading Information from potential misuse.

IntelligentCross is required to report transactions executed in the IntelligentCross ATS to the consolidated tape via a FINRA Trade Reporting Facility (TRF).

### Personal Securities Transactions

IntelligentCross policies and procedures require pre-approval of personal securities transactions by Registered Persons of the ATS and require a 30-day holding period.

The policies and procedures cover all securities transactions in outside brokerage accounts directed by employees, including but not limited to transactions in securities issued by a company (e.g. stocks, bonds), transactions in any reference securities (e.g. options, preferred stock, futures), and transactions in any packaged products including but not limited to mutual funds and exchange traded funds.

Registered Persons are not permitted to day trade in any securities. They must submit a request in writing or via email to the CCO and CEO prior to each personal securities transaction and must obtain approval from either the CCO or CEO prior to effecting a personal securities transaction. Associated Persons must submit a form or standard email request to the CCO and CEO that identifies:

Security Name & Symbol

Purchase or Sale

Quantity

For Sales: Compliance with 30 Day Holding Period

Compliance personnel conduct periodic reviews of individuals brokerage accounts to ensure compliance with IntelligentCross policies and procedures regarding personal securities transactions.

- b. Can a Subscriber consent to the disclosure of its confidential trading information to any Person (not including those employees of the NMS Stock ATS who are operating the system or responsible for its compliance with applicable rules)?

Yes  No

If yes, explain how and under what conditions.

- c. If yes to Item 7(b), can a Subscriber withdraw consent to the disclosure of its confidential trading information to any Person (not including those employees of the NMS Stock ATS who are operating the system or responsible for its compliance with applicable rules)?

Yes  No

If yes, explain how and under what conditions.

- d. Provide a summary of the roles and responsibilities of any Persons that have access to confidential trading information, the confidential trading information that is accessible by them, and the basis for the access.

The Shared Employees, certain Imperative Execution employees, the CCO, and the FINOP, and employees at Pico, and Instinet have access to Subscriber Confidential Trading Information. Generally, Shared Employees and Imperative Execution employees have access to both real-time and historical order and trade information; however, certain individuals may be provided access to only historical order and trade information given their job function. Shared Employees and Imperative Execution employees have access to Subscriber Confidential Trading Information to ensure proper operations and maintenance of the ATS. As a network provider, Pico will have access to confidential information because they monitor ~~IntelligentCross'sIntelligentCross'~~ network and host ~~IntelligentCross'sIntelligentCross'~~ equipment. As ~~IntelligentCross'sIntelligentCross'~~ clearing service provider, Instinet will have access to Subscriber execution information but not order information.

### **Part III: Manner of Operations**

#### **Item 3: Exclusion from ATS Services**

- a. Can the NMS Stock ATS exclude, in whole or in part, any Subscriber from the ATS services?

Yes  No

If yes, list and provide a summary of the conditions for excluding, in whole or in part, a Subscriber from the ATS services.

**Answer:** A Subscriber can be excluded from the ATS if the Subscriber no longer satisfies the eligibility requirements for acceptance as a Subscriber.

~~Additionally, the~~The operation of the ATS also is continuously monitored by the ATS's trading operations team ("Trading Operations") to ensure the smooth and correct functioning of the system as well as adherence to the ATS's operating procedures and the applicable securities rules and regulations. Authorized personnel can monitor order entry port status, order acknowledgement latency, market data quality, and potential trade-throughs, in addition to detailed metrics on order entry rates, open and executed exposures, and executed volumes. Authorized personnel monitor to determine whether Subscribers are sending orders in excess of 5,000 orders per second or a single order with notional value greater than \$50,000,000. Any orders in excess of these limits will be rejected by the ATS, and authorized personnel will have discussions with Subscribers who exceed these limits about their order entry behavior.

In addition to real-time monitoring, any anomalies in the activities in the ATS will be reviewed using end-of-day reports. These reports include T+1 clearing breaks, same entity crosses and execution quality reports. In the event of a problem, such as a systems error at a Subscriber or market data issues, Trading Operations may, among other actions, halt the

activity of a Subscriber or set of Subscribers and/or stock or set of stocks in order to contain the impact of a problem while pursuing a resolution.

- b. If yes to Item 3(a), are the conditions required to be identified in Item 3(a) the same for all Subscribers?

Yes  No

If no, identify and explain any differences.

Item 4: Hours of Operations

- a. Provide the days and hours of operation of the NMS Stock ATS, including the times when orders or trading interest can be entered on the ATS, and any hours of operation outside of regular trading hours.

**Answer:**

Dates and Hours of Operation

The ATS will be open for the transaction of business on all business days during which the New York Stock Exchange ("NYSE") is open for business. The ATS will observe the holiday schedule of the NYSE.

The ATS will be operational during regular US market hours, generally 9:30:00 am to 4:00:00 pm Eastern Time. It will execute trades only during Regular Trading Hours (as defined below) but will begin to accept orders beginning thirty minutes prior to the open of trading beginning 9:00 am ("Pre-Market Order Acceptance Period").

Earlier Subscriber Connectivity is available upon request, as some Subscribers initiate their start-up operations prior to 8:30 ~~AM~~am. There is no benefit to Subscribers for Earlier Subscriber Connectivity, and for those Subscribers requesting Earlier Subscriber Connectivity, the Pre-Market Order Acceptance Period still begins at 9:00 am.

Event Description	Time (Eastern Time)
System Start and Acceptance of Subscriber Connectivity	8:30 am
Pre-Market Order Acceptance Period	9:00 am -- 9:30 am
Regular Trading Hours	9:30 am - 4:00 pm

- b. Are the hours of operations the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 5: Means of Entry

- a. Does the NMS Stock ATS permit orders and trading interest to be entered directly into the ATS (e.g., via Financial Information exchange ("FIX") protocol, Binary)?

Yes  No

If yes, explain the protocol that can be used to directly enter orders and trading interest into the ATS.

**Answer:**

General Operation of the ATS

Subscribers access the ATS via a Financial Information Exchange ("FIX") connection. Such access is available to Subscribers through an internet protocol address via communications that are compliant with the FIX API provided by the ATS. The ATS currently supports FIX 4.2.

The ATS does not accept orders via any other forms of communication (e.g., telephone, email, instant message).

Required Fields

Subscribers must communicate the following information to the ATS upon order entry through FIX:

Message Type

Client Order ID (unique identifier for order per session)

Execution Instructions

Subscriber Order Capacity (Agent, Principal, Riskless)

Symbol

Side (Buy, Sell, Sell Short, Sell Short Exempt)

Display

Price ~~instructions~~Instructions

Time in Force

Time of Order Creation (expressed in UTC)

Order Type

Order Quantity

ClientID (used for identifying the client (MPID))

Handling Instruction (ATS supports automated execution and does not provide broker intervention)

Hosted Pool Tag (if applicable)

Order Parameters

Minimum Quantity - Subscribers may submit orders with a MinQty for execution. Subscribers may set MinQty to permit the aggregation of contra-side interest to meet the minimum quantity requirements.

Maximum Quantity – Subscribers may submit orders with a MaxQty for execution. MaxQty is for Midpoint Peg Orders only.

The ATS's FIX Specification is available to Subscribers upon request.

- b. If yes to Item 5(a), are the protocols required to be identified in Item 5(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- c. Are there any other means for entering orders and trading interest into the NMS Stock ATS (e.g., smart order router, algorithm, order management system, sales desk)?

Yes  No

If yes, identify and explain the other means for entering orders and trading interest, indicate whether the means are provided through the Broker-Dealer Operator, either by itself or through a third-party contracting with the Broker-Dealer Operator, or through an Affiliate of the Broker-Dealer Operator, and list and provide a summary of the terms and conditions for entering orders or trading interest into the ATS through these means.

- d. If yes to Item 5(c), are the terms and conditions required to be identified in Item 5(c) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 7: Order Types and Attributes

- a. Identify and explain each order type offered by the NMS Stock ATS. In your explanation, include the following:

- i. priority, including the order type's priority upon order entry and any subsequent change to priority (if applicable); whether and when the order type can receive a new time stamp; the order type's priority vis-à-vis other orders on the book due to changes in the NBBO or other reference price; and any instance in which the order type could lose execution priority to a later arriving order at the same price;
- ii. conditions, including any price conditions (e.g., how price conditions affect the rank and price at which it can be executed);

conditions on the display or non- display of an order; or conditions on executability and routability);

- iii. order types designed not to remove liquidity (e.g., post-only orders), including what occurs when such order is marketable against trading interest on the NMS Stock ATS when received;
- iv. order types that adjust their price as changes to the order book occur (e.g., price sliding orders or pegged orders) or have a discretionary range, including an order's rank and price upon order entry and whether such prices or rank may change based on the NBBO or other market conditions when using such order type; when the order type is executable and at what price the execution would occur; whether the price at which the order type can be executed ever changes; and if the order type can operate in different ways, the default operation of the order type;
- v. whether an order type is eligible for routing to other Trading Centers;
- vi. the time-in-force instructions that can be used or not used with each order type;
- vii. the circumstances under which order types may be combined with another order type, modified, replaced, canceled, rejected, or removed from the NMS Stock ATS; and
- viii. the availability of order types across all forms of connectivity to the NMS Stock ATS and differences, if any, in the availability of an order type across those forms of connectivity.

**Answer:**

Order Types and Order Type Modifiers

*Midpoint Discrete Peg Orders*

~~Midpoint Discrete Peg Orders are orders to buy or sell a stated amount of a security that are to be executed only at the midpoint price of the NBBO in the Midpoint Discrete Match Matching Process. The ATS will accept Midpoint Discrete Peg Orders with or without a limit price. Midpoint Discrete Peg Orders will be non-displayed.~~

The ATS operates two different matching models: (1) a Midpoint book (“Midpoint”) that only accepts non-displayed midpoint orders and (2) ASPEN (or the “Adverse Selection Protection Engine”), a full limit order book with optional displayed capability. The ATS uses a matching mechanism which is near-continuous and that matches orders at scheduled times (“Match Events”), as discussed further in Part III, Item 11.

As discussed further below, Midpoint only accepts Midpoint Peg Orders (which are not accepted in ASPEN). Any orders entered into IntelligentCross through any other order type (e.g., Market Order, Limit Order, Primary Peg Order (with or without a limit price), and Marketable Peg Order (with or without a limit price)) will default to the ~~Discrete Bid/Offer~~

~~Matching Process~~ ASPEN Fee/Fee book. Only Limit Orders and Primary Peg Orders (with or without a limit price) are eligible to be displayed on the ~~Discrete Bid/Offer Matching Process~~ ASPEN Fee/Fee book.

For Midpoint, only orders that have rested on the order book for a minimum period of time are eligible to match. Such "Minimum Resting Periods" are determined by the ATS and set in a stock-specific fashion, similar to Match Events. However, in no event will the minimum resting period exceed 200 milliseconds. There are no Minimum Resting Periods for orders on ASPEN.

#### *Midpoint ~~Discrete Time-in-Force~~ Peg Orders*

Midpoint ~~Discrete Time-in-Force~~ Peg Orders are orders to buy or sell a stated amount of a security that are to be executed only at the midpoint price of the NBBO in the Midpoint ~~Discrete Match Matching Process~~ book. The ATS will accept Midpoint ~~Discrete Time-in-Force~~ Peg Orders with or without a limit price. ~~Midpoint Discrete Time-in-Force~~ Peg Orders will be non-displayed.

#### *Midpoint ~~Discrete Time-in-Force~~ Peg Orders with Time-in-Force Instructions*

The ATS will accept Midpoint Peg Orders ~~orders~~ with time-in-force instructions. Midpoint Peg Orders may be so ~~so~~-designated, and such orders are orders to buy or sell a stated amount of a security that are to be executed only at the midpoint price of the NBBO in the Midpoint book. The ATS will accept such Peg Orders with or without a limit price, and these orders will be non-displayed. Midpoint Peg Orders with Time-in-Force instructions will be automatically canceled by the ATS within 100 milliseconds of order receipt by the matching engine; 100 milliseconds is the maximum timeframe in which a cancellation will occur. The amount of time until the ~~Midpoint Discrete Time-in-Force Peg Order~~ order will be automatically canceled is calculated from the time of order receipt. ~~The amount of time until a Midpoint Discrete Time-in-Force Peg Order is canceled is, and is~~ determined by the ~~ATS's AI Model~~ ATS and ~~is~~ calibrated on a security-by-security basis. The time period until automatic cancellation will be longer than or equal to the "~~minimum~~ Minimum Resting time pPeriod" (as discussed further in Part III, ~~Section~~ Item 11). The time period until automatic cancellation may be less than the time between Match Events such that ~~a Midpoint Discrete Time-in-Force Peg Order may be cancelled~~ the order may be canceled without participating in a Match Event. For ~~instance~~ example, if, for a particular security, the time period until automatic cancellation is 20 milliseconds but the time between Match Events is 30 milliseconds, it is possible that ~~a Midpoint Discrete Time-in-Force Peg Order~~ an order would be entered by a Subscriber and be automatically ~~cancelled~~ canceled before the first Match Event subsequent to order entry. The factors that contribute to determining the amount of time until ~~a Midpoint Discrete~~ an order ~~Time-in-Force Peg Order~~ is canceled include time of day, price reaction after trades, volume and volatility in the security, average spread, trade size, and other market factors. The time until cancellation is adjusted after enough data points have been accumulated to warrant an adjustment. A Subscriber may cancel such a Midpoint ~~Discrete Time-in-Force~~ Peg Order at any time before the order is fully executed or the ATS cancels the order.

Below is an example of the operation of a Midpoint ~~Discrete~~ Peg Order with Time-in-Force Peg Order instructions:

Security XYZ has a Match Event Interval to occur between 7 to 12 milliseconds apart.

The next Match Event is scheduled at 10:01:04:010.

At 10:01:04:000, Subscriber A submits a 1000 share Midpoint ~~Discrete Time in Force~~ Peg buy order with a limit price of \$25.06 to participate in the Midpoint ~~Discrete Matching Process~~book for Security XYZ. Assume that the time period until the Midpoint ~~Discrete Time in Force~~ Peg Order is automatically ~~cancelled~~canceled for Security XYZ is 30 milliseconds.

At 10:01:04:005, Subscriber B submits a 500 share sell order with no limit price and a TIF of Day to participate in the Midpoint ~~Discrete Matching Process~~book for Security XYZ.

At the next scheduled Match Event for Security XYZ, (10:01:04:010), the matching engine retrieves the NBBO and determines that the NBBO is \$25.05 by \$25.07. The Midpoint price at the time of the Match Event is \$25.06 and is the Matching Price. Assuming that Subscriber A's and Subscriber B's orders have met the minimum resting period, Subscriber A will match 500 shares with Subscriber B at \$25.06 during the Match Event at 10:01:04:010. Subscriber A's remaining order for 500 shares is eligible to participate in any subsequent Midpoint ~~Discrete Matching Processes~~Match Event occurring prior to the automatic cancellation of the order by the ATS at 10:01:04:030.

### *Primary Peg Orders*

Primary Peg Orders are orders to buy at the NBB, or sell at the NBO, a stated amount of a security that are to be executed only in ~~the Discrete Bid/Offer Matching Processes~~ASPEN. Orders may be submitted with or without a limit price. Primary Peg Orders may be displayed or non-displayed at the Subscriber's discretion. If a displayed Primary Peg Order would lock or cross contra-side interest displayed inside the ATS or as part of the NBBO, such order will be displayed one minimum price variation less aggressive than the price of displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price.

### *Marketable Peg Orders*

Marketable Peg Orders are orders to buy at or below the NBO, or sell at or above the NBB, a stated amount of a security that are to be executed only in the ~~Discrete Bid/Offer Matching Processes~~ASPEN book. Orders may be submitted with or without a limit price. Marketable Peg Orders will be non-displayed.

### *Limit Orders*

Limit Orders are orders to buy or sell a stated amount of a security at a specified price or better that are to be executed only in the ~~Discrete Bid/Offer Matching Processes~~ ASPEN book. Limit Orders may be displayed or non-displayed at the Subscriber's discretion. If a displayed Limit Order would lock or cross contra-side interest displayed inside the ATS or as part of the NBBO, such order will be displayed one minimum price variation less aggressive than the price of displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of the displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price.

### *Market Orders*

Market Orders are orders to buy or sell a stated amount of a security that is to be executed at or in between the NBBO only in ~~the Discrete Bid/Offer Matching Processes~~ ASPEN. Market Orders will be non-displayed.

### *Add Liquidity Only Orders*

Subscribers may designate ~~Orders~~ orders as Add Liquidity Only ("ALO"). ALO ~~Orders~~ orders are to be entered only in ~~the Discrete Bid/Offer Matching Process~~ ASPEN. ALO orders are Limit or Primary Peg orders that rest on the order book instead of the order being able to execute against contra interests that are already on the book at the same price or better price. ALO orders will only interact with other orders if the ALO order would be adding liquidity. Generally, for two given orders the one received first by the Matching Engine ~~matching engine~~ will be deemed to be adding liquidity.

### *Time-in-Force*

The ATS will accept orders with time-in-force instructions of Day or IOC. Day will be the default time-in-force instruction. Day Orders will be held by the ATS on its books from the time of receipt until the end of Regular Trading Hours. If unfulfilled by the end of Regular Trading Hours, such Day orders will be ~~cancel~~ canceled and the Subscriber who submitted the order will be notified. IOC orders ~~will only be available in the Discrete Bid/Offer Matching Processes and~~ ASPEN will be held until the completion of the next Match Event, and if unexecuted, will be canceled. IOC in combination with the Midpoint Peg instruction is processed as a Midpoint Peg Order with Time-in-Force Instruction. IOC orders may be submitted with or without a limit price. IOC ~~Orders~~ orders will be non-displayed. ~~All orders entered into the ATS are considered~~ Not Held.

### *Not Held*

All orders entered into the ATS by Subscribers are Not Held.

### Open Orders

All open orders are canceled at the end of the trading day.

### Routing

IntelligentCross does not support the routing of orders to any other venue.

### Message Priority

Incoming orders and related messages are processed in the order in which they are received by the ATS.

### Match Priority

Generally, an order's match priority will be based on price, display type (for ~~the Discrete Bid/Offer Matching Processes~~ ASPEN), and the time at which such order is received relative to other orders. With respect to ~~the Discrete Bid/Offer Matching Processes~~ ASPEN, at each price level, ~~Display Orders~~ displayed orders will have priority over non-~~Display Orders~~ displayed orders. All orders will be timestamped and accordingly prioritized based on the time of their receipt by the ATS. Matching instructions are specified in accordance with the FIX protocols described above in Part III, Item 5 and defined by industry standard FIX tags defined for these matching instructions.

Orders received by the ATS during the Pre-Market Order Acceptance Period will be queued until the beginning of Regular Trading Hours and then matched with time priority based on the order receipt by the ATS. Orders received outside these periods will not be accepted. For all eligible securities, the ATS will only execute if Limit-Up-Limit-Down ("LULD") bands are present and the effective price of a potential match is not constrained by a LULD band.

### Order Amendment

An open order may be amended by Subscribers to the extent the amendment is received by the ATS before a Match Event involving that order occurs. Order amendments are processed in the order in which they are received by the ATS. The match priority of an order will be preserved when amending the quantity of an order to a value less than the existing quantity of the order; however, the match priority of an order will be lost when amending the quantity of an order to a value greater than the existing quantity or when amending any other value in addition to the quantity of the order.

### Order Cancellation

An open order may be ~~cancelled~~ canceled by Subscribers to the extent the cancellation order is received by the ATS before a Match Event involving that order occurs. Cancellation orders will cancel all remaining open quantity on an order. Cancellation orders are processed in the order in which they are received by the ATS.

### Hosted Pools

At the request of one or more Subscribers, the ATS will setup a Hosted Pool where such Subscriber(s) may designate that an order interact with other orders entered by that same Subscriber or other Subscribers participating in the same Hosted Pool. Subscribers may enter such orders in either a principal or agency capacity. An order designated to interact within a Hosted Pool can also be designated to interact with the liquidity outside the Hosted Pool after checking for liquidity available in the Hosted Pool. In particular, during a Match Event, the matching engine will, in sequential order: (1) match orders eligible to be matched in Hosted Pools, and then (2) match orders outside the Hosted Pool, including orders designated to interact first in a Hosted Pool and then outside a Hosted Pool.

The ATS's Hosted Pools accept "Conditional Orders." Conditional Orders are not accepted outside of the ATS's Hosted Pools. See Part III, Item 9 for a discussion of Conditional Orders.

- b. Are the terms and conditions for each order type and attribute the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 8: Order Sizes

- a. Does the NMS Stock ATS require minimum or maximum sizes for orders or trading interest?

Yes  No

If yes, specify any minimum or maximum order or trading interest size requirements and any related handling procedures.

**Answer:** The minimum units of trading for NMS Stocks traded on the ATS is one share. Only orders that are \$50,000,000 or less in notional value will be eligible for trading on the ATS.

Additionally, the ATS offers minimum and maximum quantity modifiers for execution. A minimum quantity modifier allows Subscribers to request a minimum share amount on an execution, such that if the available liquidity is below the minimum quantity amount, the order will not execute. Subscribers may set the minimum quantity to permit the aggregation of contra-side interest to meet the minimum quantity requirements. A maximum quantity modifier allows Subscribers to request a maximum share amount on an execution, such that an order would not execute against any orders that have a size greater than the maximum share amount. For example, if a Subscriber set a maximum quantity of 200 shares, the order would not execute against any orders that have an order quantity greater than 200 shares. The maximum quantity modifier is for Midpoint Peg Orders only.

- b. If yes to Item 8(a), are the requirements and procedures required to be identified in Item 8(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- c. Does the NMS Stock ATS accept or execute odd-lot orders?

Yes  No

If yes, specify any odd-lot order requirements and related handling procedures (e.g., odd lot treated the same as round lot).

**Answer:** Odd ~~Lot~~lot orders are handled the same as round lot orders and are treated the same for priority purposes.

- d. If yes to Item 8(c), are the requirements and procedures required to be identified in Item 8(c) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- e. Does the NMS Stock ATS accept or execute mixed-lot orders?

Yes  No

If yes, specify any mixed lot order requirements and related handling procedures (e.g., mixed lot treated the same as round lot).

**Answer:** Mixed ~~Lot~~lot orders are handled the same as round lot and odd-lot orders and are treated the same for priority purposes.

- f. If yes, to Item 8(e), are the requirements and procedures required to be identified in 8(e) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- a. Does the NMS Stock ATS send or receive any messages indicating trading interest (e.g., IOIs, actionable IOIs, or conditional orders)?

Yes  No

If yes, identify and explain the use of the messages, including information contained in messages (e.g., price or size minimums), how the message is transmitted (e.g., order management system, smart order router, FIX), when the message is transmitted (e.g., automatically by the ATS, or upon the sender's request), the type of Persons that receive the message (e.g., Subscribers, Trading Centers), responses to conditional orders or IOIs (e.g., submission to firm-up conditional orders), and the conditions under which the message might result in an execution in the ATS (e.g., response time parameters, interaction, and matching).

The ATS's Hosted Pools accept "Conditional Orders." The ATS does not accept Conditional Orders outside of the ATS's Hosted Pools, and Conditional Orders are only available as part of the Midpoint ~~Discrete Matching Process~~ matching process inside the Hosted Pool. A Conditional Order also must contain the same information as a firm order being entered ~~as part of~~ into the Midpoint ~~Discrete Matching Process~~ book.

A Conditional Order is an instruction to the ATS that the Subscriber wants to interact with the Hosted Pool on a conditional basis. A Conditional Order never executes; instead, ~~when a Conditional Order would otherwise match with a firm order or a Conditional Order in the Hosted Pool the Conditional Order is cancelled by the ATS and an Invite is sent to the originating Subscriber, inviting the Subscriber to send a Firm-Up Order in response.~~

~~in~~ ~~A Firm-Up Order must contain the same symbol and side as the Conditional Order related to the Invite or it will be rejected by the ATS. A Firm-Up Order must be designated to interact with (1) the Hosted Pool, or (2) the Hosted Pool and then the liquidity outside the Hosted Pool after checking for liquidity in the Hosted Pool. A Firm-Up Order must be designated to participate in the Midpoint Discrete Matching Process. The Firm-Up Orders will have a time in force of one (1) second, after which any unfilled portion will be cancelled. The Firm-Up Orders are treated like "standard" firm orders for matching and priority purposes. A Firm-Up Order does not need to be submitted within a specified time period after an Invite is sent.~~

~~Conditional Order Interaction:~~ In the event eligible contra-party interest exists in the Hosted Pool, whether such contra-party interest is a firm or Conditional Order, the ATS will cancel the Conditional Order, will notify the Subscriber submitting the Conditional Order via FIX (~~such notification,~~ the "Invite"), and request that the Subscriber "firm-up" by submitting a firm order in response to the Invite (~~such firm orders,~~ "Firm-Up Orders"). For purposes of determining whether to generate an Invite, only contra-side interest that would have permitted an execution at the time of the match (had both the Conditional Orders and contra-side interest been firm orders), including satisfying the

Conditional Order's minimum quantity size requirement, are considered "eligible." A single eligible contra-side order may generate multiple Invites. For example, where two Conditional Orders are resting on the ATS and a single eligible contra-side order is submitted, both Conditional Orders will receive Invites.

A Firm-Up Order must contain the same symbol and side as the Conditional Order related to the Invite or it will be rejected by the ATS. A Firm-Up Order must be designated to interact with (1) the Hosted Pool, or (2) the Hosted Pool and then the liquidity outside the Hosted Pool after checking for liquidity in the Hosted Pool. A Firm-Up Order must be designated to participate in the Midpoint matching process. The Firm-Up Orders will have a time-in-force of one (1) second, after which any unfilled portion will be canceled. The Firm-Up Orders are treated like "standard" firm orders for matching and priority purposes. A Firm-Up Order does not need to be submitted within a specified time period after an Invite is sent.

- b. If yes to Item 9(a), are the terms and conditions governing conditional orders and indications of interest the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 10: Opening and Reopening

- a. Explain how the NMS Stock ATS opens or re-opens for trading, including when and how orders and trading interest are priced, prioritized, matched, and executed, and identify any order types allowed prior to the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.

**Answer:**

The ATS will open for trading in a given security when:

1. A transaction in the security has occurred and a trade has been reported on the consolidated tape;
- ~~2.~~ There is at least one publicly-displayed limit buy and one publicly-displayed limit sell
- ~~3.~~ order for the security;
- ~~4.~~ Regular Trading Hours have begun; and,
- ~~5.~~ Valid LULD bands for the security have been publicly disseminated.

If an NMS Stock is halted for trading, the ATS will resume matching when:

1. It receives a message from the SIP indicating that trading has resumed in the security;
2. Valid LULD bands are present; and

3. An execution in that security has occurred and a trade has been reported on the consolidated tape.
- b. Are the processes and procedures governing opening and re-opening the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- c. Explain how unexecuted orders and trading interest are handled at the time the NMS Stock ATS begins regular trading at the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.

**Answer:** Orders received by the ATS during the Pre-Market Order Acceptance Period will be queued until the beginning of Regular Trading Hours and then matched at the first Match Event in each matching process (as defined in Part III, Item 11) based on priority as described in Part III, Item 7 with an order's time priority based on its receipt by the ATS. Orders received outside these periods will not be accepted. In the event of a stoppage of trading during Regular Trading Hours due to a trading halt, the ATS will cancel any unfilled orders already resting on its books and reject any new orders during the trading halt. The ATS will accept new orders when the trading halt is lifted. Any unfilled orders that remain open at the end of Regular Trading Hours will automatically be ~~cancelled~~canceled.

- d. Are the processes or procedures governing unexecuted orders and trading at the time the NMS Stock ATS begins regular trading at the start of regular trading hours, or following a stoppage of trading in a security during regular trading hours, the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- e. Are there any differences between pre-opening executions, executions following a stoppage of trading in a security during regular trading hours, and/or executions during regular trading hours?

Yes  No

If yes, identify and explain the differences.

Item 11: Trading Services, Facilities and Rules

- a. Provide a summary of the structure of the NMS Stock ATS marketplace (e.g., crossing system, auction market, limit order matching book) and explain the means and facilities for bringing together the orders of multiple buyers and sellers on the NMS Stock ATS.

**Answer:**

*Discrete Match Events*

~~The ATS accepts orders in all NMS Stocks eligible for trading (e.g., those that are not subject to a trading halt). The ATS offers~~ The ATS operates two separate ~~different~~ matching processes ("Matching Processes") that execute orders using discrete match events ("Match Events") in each security. Subscribers choose which Matching Process to which they send their orders. The Matching Processes are ~~models: (1) the "a~~ Midpoint Discrete Matching Process," which book ("Midpoint") that only include ~~Midpoint Discrete Peg Orders and Midpoint Discrete Time-in-Force Orders~~ accepts non- ~~displayed midpoint orders~~ and executes such orders at the midpoint of the prevailing NBBO at the time of the Match Event; and (2) the "Discrete Bid/Offer Matching Processes," which includes limit, market, ALO, and primary and market-peg orders that execute at , and (2) ASPEN (or the "Adverse Selection Protection Engine"), a ~~full~~ three ~~limit order books with optional displayed capability (i.e., orders in ASPEN may be marked by Subscribers as either displayed or non-displayed) which executes orders at prices that are at or between the prevailing NBBO at the time of the Match Event. The Midpoint Discrete Matching Process is also referred to as Intelligent Midpoint. The Discrete Bid/Offer Matching Process is also referred to as ASPEN (Adverse Selection Protection Engine). Subscribers choose which matching model to which they send their orders. While the matching models operate under the same "market participant identifier" (or "MPID") – INCR – each matching model is distinct and does not interact with the other matching model.~~

~~The Discrete Bid/Offer Matching Processes are~~ The ASPEN matching model has three ~~separate but identical Matching Processes that are~~ distinct books ~~distinguished solely by their~~ different ~~fee structure. The three Discrete Bid/Offer Matching Processes are:~~ "Discrete Bid/Offer structures – ASPEN Fee/Fee"; "Discrete Bid/Offer, ASPEN Maker/Taker"; and "Discrete Bid/Offer ASPEN Taker/Maker." ~~All Matching Processes, including the Midpoint Discrete Matching Process,~~ three books ~~act independent of each other, i.e., orders resting in one book do not~~ rest on or ~~interact with orders resting in another book. All three ASPEN books also operate with different MIC codes: ASPEN Fee/Fee - ASPN; ASPEN Maker/Taker - ASMT; and ASPEN Taker/Maker - ASPI.~~

~~Orders in the Midpoint Discrete Matching Process will not be displayed. Orders in the Discrete Bid/Offer Matching Processes may be marked by Subscribers as either displayed or non-displayed. Orders eligible to be Displayed Orders are: (1) Limit Orders, including ALO Orders and (2) Primary Peg Orders, including ALO Orders. The ATS will not display Limit Orders and Primary Peg Orders that lock or cross contra-side interest that is displayed (1) inside the ATS or (2) as part of the National Best Bid or Offer ("NBBO") as determined by the SIP and/or SRO proprietary data feeds. Instead, if a displayed Limit Order or Primary Peg Order would lock or cross displayed contra-side interest inside the ATS or the NBBO, such order will be displayed one minimum price variation less aggressive than the price of the displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or as part of the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed~~

~~contra-side interest inside the ATS or as part of the NBBO, up to the order's limit price. ALO orders will only execute if they are adding liquidity and will remain on the order book until canceled or fully executed.~~

~~The Midpoint book only accepts Midpoint Peg Orders, which are not accepted in any of the ASPEN books; orders in the Midpoint book will therefore not be displayed. Any orders entered into IntelligentCross through any other order type (e.g., Market Order, Limit Order, Primary Peg Order (with or without a limit price), and Marketable Peg Order (with or without a limit price)) will default to the ASPEN Fee/Fee book. A subscriber who wishes to trade in the ASPEN Maker/Taker or Taker/Maker books must affirmatively identify those books when entering their order. Subscribers can route to the different ASPEN books by utilizing FIX tags to specify which ASPEN book to send their order to, and can also request dedicated sessions to specific books.~~

- b. Are the means and facilities required to be identified in Item 11(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

- c. Explain the established, non-discretionary rules and procedures of the NMS Stock ATS, including order interaction rules for the priority, pricing methodologies, allocation, matching, and execution of orders and trading interest, and other procedures governing trading, such as price improvement functionality, price protection mechanisms, short sales, locked-crossed markets, the handling of execution errors, and the time-stamping of orders and executions.

**Answer:**

~~The ATS accepts orders in all NMS Stocks eligible for trading (e.g., The Matching Process those that are not subject to a trading halt) and uses a matching mechanism which is near-continuous and that matches orders at scheduled times ("Match Events"). The ATS' two different matching models – Midpoint and ASPEN - contain the following characteristics ~~and~~ (any differences between ~~them~~ the matching models will be noted accordingly).~~

Match Events

Determination of Matching Schedule

~~Matching schedules are calculated using an overnight optimization process that uses, among other things, historical performance measurements from prior days' matches. Each security has an individualized matching schedule, computed to maximize price stability after trades. Each day starts with a prepared matching schedule for each security that does not change throughout the day.~~

~~The Match Events in each security occur at scheduled times as determined by the ATS's matching algorithm that does not change throughout the day. ~~and are calibrated separately by each Matching Process. Each Matching Process acts independently of each other. Described below is how the ATS determines the~~ Match schedules are defined by~~

~~“minimum/maximum time between Match Events and how the ATS calibrates this time for each Matching Process.~~

~~bands” for each security (“Match Event Intervals ~~for~~”). Midpoint ~~Discrete Matching Process~~~~

~~The ATS randomizes the time between Match Events within a time range (“Match Event Intervals”); Match Event Intervals are calibrated on a security by security basis. A Match Event Interval for a security consists of a minimum amount of time between Match Events and a maximum amount of time between Match Events. The reason the time between Match Events is randomized within a Match Event Interval is to prevent Subscribers from attempting to discern a trading advantage by determining when the next Match Event will occur. The Midpoint Discrete Matching Process has Match Event Intervals between 150 microseconds and up to 200 milliseconds that are calibrated on a security-by-security basis. ASPEN’s Match Event Intervals can have a minimum time of 150 microseconds and a maximum time of 900 microseconds (i.e., the maximum time for scheduling a match event is capped at 900 microseconds), also calibrated on a security-by-security basis. For example, on a particular day, the match event band for XYZ stock may have a minimum time of 450 microseconds and a maximum time of 600 microseconds. The actual match event time is randomized within the match event band throughout the course of the trading day.~~

---

#### Execution of Orders and Match Events

Any order for a security that arrives prior to a Match Event for that security (and that has not been canceled, has become unmarketable, or has been repriced prior to the match event) will be eligible to participate in the next Match Event. Match Events are scheduled continuously while the book is in a “matchable state” (i.e., there is an order on each side eligible to match); if there are no orders for a stock in the book, no Match Event will be scheduled. An incoming order that will make the book potentially matchable will trigger a scheduling of a Match Event if one has not already been scheduled.

The matching process is completely symmetric, i.e., the match times within IntelligentCross are not chosen to favor a particular side of the trade. No subscribers (or non-subscribers accessing IntelligentCross through a subscriber) are given any type of priority through the matching process, and the matching process is blind to the identity of the subscriber (or a non-subscriber accessing IntelligentCross through a subscriber). Both sides of the trade (buyers and sellers) are on equal footing for the next scheduled match, while maintaining full control of their orders - both sides can cancel or update their orders at any time prior to the match.

Open orders may be amended to the extent the amendment is received before a match event involving that order occurs. Order amendments are processed in the order in which they are received by the ATS. The match priority of an order will be preserved when amending the quantity of an order to a value less than the existing quantity of the order; however, the match priority of an order will be lost when amending the quantity

of an order to a value greater than the existing quantity or when amending any other value in addition to the quantity of the order.

An open order also may be canceled to the extent the cancellation order is received before a match event involving that order occurs. The ATS will automatically update its quotations, and all quotation updates, including those due to new or canceled orders, are immediate.

### Midpoint Match Event Process and Match Event Intervals

At each Match Event for each security in Midpoint, the matching engine for the Midpoint ~~Discrete Matching Process~~ book will retrieve the current NBBO and check its book for orders that can be matched. Orders eligible for matching will be matched in time priority at the NBBO midpoint price at the Match Event. The purpose of the scheduled matches is to achieve two objectives: (1) provide for as many matches as possible to maximize liquidity; and (2) keep the NBBO as stable as possible for a period of time after executions occur on the ATS. During ~~Match Event Intervals (i.e., the time between Match Events)~~,<sup>2</sup> Subscribers have full order control and can cancel or reprice orders until the next Match Event.

The ~~ATS's artificial intelligence functionality model ("AI Model")~~ ATS then analyzes the executions that occur on the ATS, including in Hosted Pools, and adjusts the Match Event Interval to achieve the two objectives described above. Other factors that contribute to determining the Match Event Interval include time of day, volume and volatility in the security, average spread, trade size, and other market factors. The Match Event Intervals per security are adjusted overnight after enough data points have been accumulated to warrant an adjustment.

Below is an example of how the Midpoint ~~Discrete Matching Process~~ matching process works using Match Event Intervals. The assumptions include:

- Security XYZ has a Match Event Interval ~~to occur~~ between 7 to 12 milliseconds ~~apart~~.
- The next Match Event is scheduled at 10:01:04:003.
- Subscriber A has submitted a 500 share buy order with a limit price of \$25.06 and TIF of Day ~~to participate in the Midpoint Discrete Matching Process~~ for Security XYZ.
- Subscriber B has submitted a 200 share buy order with a limit price of \$25.07 and TIF of Day ~~to participate in the Midpoint Discrete Matching Process~~ for Security XYZ (this order was received after Subscriber A's order so Subscriber A has priority over Subscriber B).
- Subscriber C submits a 600 share sell order with no limit price and a TIF of Day ~~to participate in the Midpoint Discrete Matching Process~~ for Security XYZ.

At the next scheduled Match Event for Security XYZ, (10:01:04:003), the matching engine retrieves the NBBO and determines that the NBBO is \$25.05 by \$25.07. The Midpoint price at the time of the Match Event is \$25.06 and is the Matching Price-matching price. As a result, the following executions occur during the Match Event at 10:01:04:003.

Subscriber A will match 500 shares with Subscriber C at \$25.06.

Subscriber B will match 100 shares with Subscriber C at \$25.06.

Subscriber A's 500 share order has been fully filled.

Subscriber B received a fill of 100 shares and has 100 shares remaining that will be eligible for the next Match Event.

Subscriber C's 600 share order has been fully filled.

The next Match Event will be at a time between 10:01:04:010 and 10:01:04:015 because the last match event was at 10:01:04:003 and the Match Event Intervals are between 7 and 12 milliseconds apart. This process will continue throughout the trading day.

The AI Model ~~ATS~~ makes an overnight daily determination as to whether the Match Event Intervals for each security should be increased, decreased, or stay the same, and Registered Persons of the ATS review and approve thesuch changes ~~made by the AI Model~~.

In the XYZ example described above, the Match Event Intervals could increase ~~(e.g., from 7-12 milliseconds to 12-16 milliseconds)~~, stay the same ~~(7-12 milliseconds)~~, or decrease ~~(e.g., from 7-12 milliseconds to 5-8 milliseconds)~~.

### *ASPEN Match Event Process and Match Event Intervals for The Discrete Bid/Offer Matching Processes*

~~The Discrete Bid/Offer Matching Processes~~ ASPEN will have Match Event Intervals between 150 and 900 microseconds that will be calibrated on a security-by-security basis. The AI Model ~~matching process and process~~ for determining the Discrete Bid/Offer Matching Processes Match Event Intervals for ASPEN is similar to ~~the AI Model of the that for~~ Midpoint ~~Discrete Matching Process~~ but is Match Event Intervals are calibrated separately such that, for any given security, the Match Event Intervals for ~~the Discrete Bid/Offer Matching Processes~~ ASPEN will be different from the Match Event Intervals for ~~the Midpoint Discrete Matching Process~~. The Match Event Intervals for the three ASPEN books will be the same for a given security.

Below is an example of ~~how the~~ Discrete Bid/Offer Matching Processes ASPEN matching process works using Match Event Intervals. The assumptions include:

- Security XYZ has a Match Event Interval ~~to occur~~ between 175 to 200 microseconds ~~apart~~.
- The next Match Event is scheduled at 10:01:04:003:005.
- Subscriber A has submitted a 500 share buy limit order with a limit price of \$25.06 and TIF of Day ~~to participate in the Discrete Bid/Offer Matching Processes~~ for Security XYZ.
- Subscriber B has submitted a 200 share buy limit order with a limit price of \$25.07 and TIF of Day ~~to participate in the Discrete Bid/Offer Matching Processes~~ for Security XYZ.
- Subscriber C submits a 600 share sell market order with no limit price and TIF of Day ~~to participate in the Discrete Bid/Offer Matching Processes~~ for Security XYZ.

At the next scheduled Match Event for Security XYZ (10:01:04:003:005), the matching engine retrieves the NBBO and determines that the NBBO is \$25.05 by \$25.07. As a result, the following executions occur during the Match Event at 10:01:04:003:005:

Subscriber B will match 200 shares with Subscriber C at \$25.07.

Subscriber A will match 400 shares with Subscriber C at \$25.06.

Subscriber B's 200 share order has been fully filled.

Subscriber A received a fill of 400 shares and has 100 shares remaining that will be eligible for the next Match Event.

Subscriber C's 600 share order has been fully filled at prices of \$25.06 and \$25.07.

The next Match Event will be at a time between 10:01:04:003:180 and 10:01:04:003:205 because the last match event was at 10:01:04:003:005 and the Match Event Intervals are between 175 and 200 microseconds apart. This process will continue throughout the trading day.

The ~~AI Model~~ ATS makes a daily determination as to whether the Match Event Intervals for each security should be increased, decreased, or stay the same. ~~Registered Persons of~~ In the ATS review and approve example described above the changes made by Match Event Intervals could increase, stay the AI Model, same, or decrease.

~~In the XYZ example described above the Match Event Intervals could increase (e.g., from 175-200 microseconds to 185-205 microseconds), stay the same (175-200 microseconds), or decrease (e.g., from 175-200 microseconds to 165-180 microseconds). The AI Model determines the amount of the increase or decrease in the Match Event Intervals.~~

### Midpoint Minimum Resting Period

For ~~the Midpoint Discrete Matching Process~~, only orders that have rested on the order book for a minimum period of time are eligible to match. "Minimum Resting Periods" are determined by the ~~AI Model~~ATS and set in a stock-specific fashion, similar to Match Events. The purpose of these periods is to further reduce adverse selection. However, in no event will the minimum resting period exceed 200 milliseconds. ~~At this time, there will be~~There are no Minimum Resting ~~Period~~Periods for orders on ~~the Discrete Bid/Offer Matching Processes~~ASPEN.

### Anti-Internalization

The ATS provides an "anti-internalization" setting to its Subscribers. This setting can be enabled upon client request and will prevent the self-matching of two orders from the same Subscriber on the ATS's order books. This setting will not be enabled by default, but can be enabled upon Subscriber request and will be enforced by the Client ID setting. Subscribers can either contact IntelligentCross ~~trading operations~~Trading Operations to enable this functionality on an MPID basis or they can configure the trading systems to prevent self-crossing at a client or trading desk level.

### Locked or Crossed Market

The ATS will not match if the NBBO as determined by the SIP and/or SRO proprietary data feeds for the stock is crossed (where the NBB price exceeds the NBO price) or if the NBBO as determined by the SIP and/or other SRO proprietary data feeds is locked (where the NBB price equals the NBO price).

In ASPEN, if a displayed Limit Order or Primary Peg Order would lock or cross displayed contra-side interest inside the ATS or the NBBO, such order will be displayed one minimum price variation less aggressive than the price of the displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or as part of the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or as part of the NBBO, up to the order's limit price.

### Sub-Dollar Pricing

For orders in ~~the Midpoint Discrete Matching Process~~, in the event that the NBB is less than \$1.00, the ATS will execute orders at the midpoint price, regardless of the number of decimal places.

For orders in ~~the Discrete Bid/Offer Matching Processes~~ ASPEN, in the event that the NBB is less than \$1.00, the ATS will execute orders at valid prices within the NBBO.

### Orders Eligible for Matching

With respect to the Midpoint ~~Discrete Matching Process~~ book, the following orders will be eligible for matching during a Match Event:

1. Midpoint ~~Discrete~~ Peg Orders that are buy orders with limit prices equal to or higher than NBBO midpoint.
2. Midpoint ~~Discrete~~ Peg Orders that are sell orders with limit prices equal to or lower than NBBO midpoint.
3. Midpoint ~~Discrete~~ Peg Orders without limit prices.

Midpoint ~~Discrete Time in Force~~ Peg Orders ~~that are buy orders~~ also may be designated with limit prices equal to or higher than NBBO midpoint. Time-in-Force instructions.

- ~~4. Midpoint Discrete Time in Force Peg Orders that are sell orders with limit prices equal to or lower than NBBO midpoint.~~
- ~~5. Midpoint Discrete Time in Force Peg Orders without limit prices.~~

With respect to the ~~Discrete Bid/Offer Matching Processes~~ ASPEN books, the following orders will be eligible for matching during a Match Event:

1. Primary Peg Orders with no limit price or those with limit prices that are within the prevailing NBBO at the time of a Match Event.
2. Market Peg Orders with no limit price or those with limit prices that can execute within the prevailing NBBO at the time of a Match Event.
3. Limit Orders with limit prices that are within the prevailing NBBO at the time of a Match Event.
4. Market Orders.
- ~~5. ALO Orders~~

### Match Priority Criteria

Generally, an order's match priority will be based on price, display type (for ~~the Discrete Bid/Offer Matching Processes~~ ASPEN), and the time at which such order is received relative to other orders. With respect to ~~the Discrete Bid/Offer Matching Processes~~ ASPEN, at each price level, Display Orders displayed orders will have priority over non-Display Orders displayed orders. All orders will be timestamped and accordingly prioritized based on the time of their receipt by the ATS. Matching instructions are specified in accordance with the FIX protocols described above in Part III, Item 5 and defined by industry standard FIX tags defined for these matching instructions.

Orders received by the ATS during the Pre-Market Order Acceptance Period will be queued until the beginning of Regular Trading Hours and then matched with time priority based on the order receipt by the ATS. Orders received outside these periods will not be

accepted. For all eligible securities, the ATS will only execute if Limit-Up-Limit-Down ("LULD") bands are present and the effective price of a potential match is not constrained by a LULD band.

An amendment of an outstanding order will affect its match priority and Minimum Resting Period as follows:

1. -If an order's size is decreased, its timestamp will remain the same, its priority will not change and it will not wait through a new Minimum Resting Period- (in the case of Midpoint).
2. -If an order's size is increased, the timestamp will be renewed, its priority will change and, if part of ~~the Midpoint-Discrete Matching Process~~, it will wait through a new Minimum Resting Period.
3. If an order's price is changed, the timestamp will be renewed, its priority will change and, if part of ~~the Midpoint-Discrete Matching Process~~, it will wait through a new Minimum Resting Period.

IntelligentCross conducts trading strictly in an agency capacity on the ATS. IntelligentCross does not conduct trading in a proprietary capacity.

#### Non-Match Events

Situations may occur where an incoming order may not execute against a resting order at match event time, such as when:

- (1) an existing resting order cancels prior to the next match event
- (2) an incoming order is canceled prior to the next match event
- (3) the NBBO moves between the time an order is received and the next match event takes place, making either the incoming order or the resting order non-marketable
- (4) the NBBO changed before the next match event and pegged orders were repriced to the new NBBO, making the incoming order or the resting pegged order non-marketable

#### Execution Errors

The ATS has written supervisory policies and procedures in place to handle trade execution errors and "clearly erroneous trades." Each potential error situation will be evaluated by the ATS's personnel on a case by-case basis. ~~In particular, the ATS's error policy is included within the ATS's Subscriber Agreement that is signed by both parties (ATS and client) prior to the Subscriber's commencement of trading activity upon the ATS's platform.~~

If a trade is transacted in error and it is determined that the error was due to a system failure or other issue with the ATS's platform that resulted in a poor execution (*i.e.*, outside the NBBO), the ATS will contact each of the Subscribers associated with the error cross trade and inform them that the ATS is canceling the trade. The ATS will then initiate the cancel on the ATS and communicate either electronically (ACT Web for NASDAQ TRF) or over the telephone (NYSE TRF) the trade report cancellation for each side of the cross trade. In the instances in which the trade was good (*i.e.*, inside the

NBBO), and as a result of a systems issue, the ATS failed to acknowledge the execution to one of the two Subscribers associated with the error cross trade transacted on the ATS, the ATS will contact the affected Subscriber and ask whether or not they want to maintain (keep) the trade. If the Subscriber does not want to maintain the trade, the ATS will take the affected Subscriber's position and book it to IntelligentCross's IntelligentCross' error account. IntelligentCross will then instruct IntelligentCross' clearing broker to trade out of the error position ~~via IntelligentCross's routing broker as soon as is possible~~. An IntelligentCross employee will book the error position and subsequently close-out the transaction through IntelligentCross's IntelligentCross' error account for settlement purposes and document within IntelligentCross's IntelligentCross' systems all details regarding the error transaction(s). The error transaction detail will include all details surrounding the error trade(s) and subsequent close-out trades (if any). The detail will also include an identification of all associated parties, the cause/reason for the error, or details surrounding Subscriber contact(s). The error trade detail will then be reviewed and electronically signed off as "compliance review" by the CCO or his designee and subsequently reviewed and signed off on as "Supervisory Review" by IntelligentCross's IntelligentCross' CEO or his/her supervisory principal designee.

The ATS will also ensure accurate CAT reporting.

With respect to a market wide event that may contain clearly erroneous transaction, the ATS monitors all email notification regarding clearly erroneous transactions. Upon receipt of a clearly erroneous e-mail notification, the ATS will immediately review the ATS's trading activity during the relevant timeframe to determine whether or not the ATS traded the securities referenced in the notification. The ATS will then take immediate action (if any executions have been identified through the review) to reverse the trades upon the ATS and NASDAQ's WebLink ACT. A file in IntelligentCross's IntelligentCross' systems will be created that documents any ACT reversals that have been performed as a result of a clearly erroneous notification.

### Order Entry Restrictions

The ATS will not accept orders that reference a symbol not authorized for trading (*e.g.*, if there is a trading halt). The minimum price variation ("MPV") for orders received by the ATS shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00. Orders received with increments below the MPV will be rejected.

Sell orders must be designated as long, short or short exempt in the event there is a short sale restriction in place. Subscribers are responsible for the compliance of their trades with all short sale locate and delivery rules and regulations.

### Anonymity

All orders, and executions, ~~clearing contracts, and post-trade reports~~ are anonymous: as to and between Subscribers. Subscribers are only made aware of IntelligentCross as a party or contra-party on orders and executions.

The ATS does not provide any means of communication between Subscribers. There is no negotiation, chat, instant message, indication of interest, "Flash Order"," or similar functionality provided.

### Hosted Pools

At the request of one or more Subscribers, the ATS will setup a Hosted Pool where such Subscriber(s) may designate that an order interact with other orders entered by that same Subscriber or other Subscribers participating in the same Hosted Pool. Unless otherwise stated, the matching and trading rules in a Hosted Pool are the same as in the ATS.

Subscribers may designate an order to interact within a Hosted Pool, as well as to interact with the liquidity outside the Hosted Pool after checking for liquidity in the Hosted Pool. In particular, at each Match Event, the matching engine will, in sequential order, (1) match orders eligible to be matched in Hosted Pools, and then (2) match orders outside the Hosted Pool, including orders designated to interact first in a Hosted Pool and then outside a Hosted Pool.

The ATS's Hosted Pools accept "Conditional Orders." Conditional Orders are not accepted outside of the ATS's Hosted Pools. See Part III, Item 9 for a discussion of Conditional Orders.

- d. Are the established, non-discretionary rules and procedures required to be identified in Item 11(c) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

### Item 14: Counter-Party Selection

- a. Can orders or trading interest be designated to interact or not interact with certain orders or trading interest in the NMS Stock ATS (e.g., designated to execute against a specific Subscriber's orders or trading interest or prevent a Subscriber's order from executing against itself)?

Yes  No

If yes, explain the counter-party selection procedures, including how counter-parties can be selected, and whether the designations affect the interaction and priority of trading interest in the ATS.

### Anti-Internalization

The ATS provides an "anti-internalization" setting to its Subscribers. This setting can be enabled upon client request and will prevent the self-matching of two orders from the same Subscriber on the ATS's order books. This setting will not be enabled by default, but can be enabled upon Subscriber request and will be enforced by the Client ID setting. Subscribers can either contact IntelligentCross ~~trading operations~~ Trading Operations to enable this functionality on an MPID basis or they can configure the trading systems to prevent self-crossing at a client or trading desk level.

### Hosted Pool

At the request of one or more Subscribers, the ATS will setup a Hosted Pool where such Subscriber(s) may designate that an order interact with other orders entered by that same Subscriber or other Subscribers participating in the same Hosted Pool. Unless otherwise indicated, the matching and trading rules in a Hosted Pool are the same as in the ATS. The ATS will determine whether or not to offer Hosted Pool functionality on a Subscriber-by-Subscriber basis, with the ATS making its determination mainly based on current and expected order flow volume.

- b. If yes to Item 14(a), are the procedures for counter-party selection required to be identified in Item 14(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

~~The~~ With respect to Hosted Pools, the ATS will determine whether or not to offer Hosted Pool functionality on a Subscriber-by-Subscriber basis, with the ATS making its determination mainly based on current and expected order flow volume. Notwithstanding the foregoing, the procedures for trading in a Hosted Pool are the same for all Subscribers.

### Item 15: Display

- a. Does the NMS Stock ATS operate as an Electronic Communication Network as defined in Rule 600(a)(23) of Regulation NMS?

Yes  No

- b. Are Subscriber orders and trading interest bound for or resting in the NMS Stock ATS displayed or made known to any Person (not including those employees of the NMS Stock ATS who are operating the system)?

Yes  No

If yes, explain the display procedures, including how and when Subscriber orders and trading interest are displayed, how long orders and trading interest are displayed, what information about orders and trading interest is displayed, and the functionality of the Broker-Dealer Operator and types of market participants that receive the displayed information.

For ~~the Discrete Bid/Offer Matching Processes~~ ASPEN, the ATS offers the IQX Data Feed, which displays orders eligible ~~orders to be displayed~~ in real-time to IQX Data Feed Recipients. Subscribers, in their discretion, may submit Limit Orders and Primary Peg Orders, ~~Limit Orders and ALO Orders~~ as displayed orders. Displayed orders from all three ASPEN books are available in the IQX Data Feed. Each of the ASPEN books have individualized data feeds; as such, subscribers to the IQX Data Feed can choose to consume data from whichever books they choose through separate feed identifiers.

The ATS will not display Limit Orders and Primary Peg Orders that lock or cross contra-side interest that is displayed (1) inside the ATS or (2) as part of the ~~National Best Bid or Offer~~ (“NBBO”) as determined by the SIP and/or SRO proprietary data feeds. Instead, if a displayed Limit Order or Primary Peg Order would lock or cross displayed contra-side interest inside the ATS or as part of the NBBO, such order will be displayed one minimum price variation less aggressive than the price of displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order’s displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or the NBBO, up to the order’s limit price, and such order’s ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or the NBBO.

For all ~~Displayed Orders~~ displayed orders, the ATS disseminates all eligible bids and offers along with the size available (full depth of book) in the IQX Data Feed as part of ~~the Discrete Bid/Offer Matching Processes~~ ASPEN. The IQX Data Feed also disseminates all executions that occur in ~~the Discrete Bid/Offer Matching Processes~~ ASPEN – displayed and non-displayed - in real-time. The execution information includes the price and number of shares executed.

Orders designated by a Subscriber to interact with other orders in a Hosted Pool are not eligible to be ~~Displayed Orders~~ displayed orders. Executions occurring in a Hosted Pool are not disseminated in the IQX Data Feed.

- c. If yes to Item 15(b), are the display procedures required to be identified in 15(b) the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 19: Fees

- a. Identify and describe any fees or charges for use of the NMS Stock ATS services, including the type of fees (e.g., subscription, connectivity), the structure of the fees (e.g., fixed, volume-based, transaction-based), variables that impact the fees (e.g., types of securities traded, block orders, form of connectivity to the ATS), differentiation among types of Subscribers (e.g.,

broker-dealers, institutional investors, retail) and range of fees (e.g., high and low).

**Answer:** For the Midpoint ~~Discrete Matching Process~~book and the ~~Discrete Bid/Offer Matching Process~~ASPEN Fee/Fee book, the Base Rate charged by IntelligentCross is .0008 per share for each side of a transaction.

The Base Rate for ~~the Discrete Bid/Offer Matching Process~~ASPEN Maker/Taker is (.0028) rebate per share for Subscribers that provide liquidity and .0030 per share fee for Subscribers that remove liquidity.

The Base Rate for ~~the Discrete Bid/Offer Matching Process~~ASPEN Taker/Maker is (.0016) rebate per share for Subscribers that remove liquidity and .0020 per share fee for Subscribers that provide liquidity.

Orders executed in a Hosted Pool are charged fees in a range from .0001 to .0030 per share. The fees associated with the Hosted Pool are negotiated fees, and may be re-evaluated from time to time.

The other fees incurred by Subscribers of the ATS are SRO fees and fees charged by our clearing provider, Instinet.

The ATS passes through certain regulatory fees (including FINRA's Section 3 fee and Trading Activity Fee ("TAF") for Subscribers who are not FINRA members), and fees billed to the ATS for Subscribers through third-party providers for accessing market data.

- b. Identify and describe any fees or charges for use of the NMS Stock ATS services that are bundled with the Subscriber's use of non-ATS services or products offered by the Broker-Dealer Operator or its Affiliates, including a summary of the bundled services and products, the structure of the fee, variables that impact the fee, differentiation among types of Subscribers, and range of fees.

**Answer:** N/A.

- c. Identify and describe any rebate or discount of fees or charges required to be identified in Items 19(a) and 19(b), including the type of rebate or discount, structure of the rebate or discount, variables that impact the rebate or discount, differentiation among types of Subscribers, and range of rebate or discount.

**Answer:** With respect to trading in the Midpoint ~~Discrete Matching Process~~book and the ~~Discrete Bid/Offer Matching Process~~ASPEN Fee/Fee book, there are two ways existing ATS Subscribers can pay lower fees, ("Subscriber Fee Discount"), as described below:

**1. Total Composite Volume (TCV) Incentive\*--if average daily participation of TCV is:**

<u>TCV %</u>	<u>Commission rate per share traded</u>
=> 12 bps of TCV	2 mils per share

=> 10 bps of TCV	3 mils per share
=> 8 bps of TCV	4 mils per share
=> 4 bps of TCV	6 mils per share
=> Base Rate	8 mils per share

**\*Criteria**

- The Base Rate is the same for all Subscribers.
- Any Subscriber Fee Discount Rate will be calculated retroactively on all shares traded for that calendar month ~~and will be rounded down.~~
- TCV is the total market volume in all NMS Stocks reported to the Consolidated Tape.

**2. Active Order Incentive\*\***

Live in 200 to 500 unique symbols at a time (on average) 6 mils per share  
 Live in 501 to 1000 unique symbols at a time (on average) 4 mils per share  
 Live in 1001 to 2000 unique symbols at a time (on average) 3 mils per share  
 Live in over ~~2000~~2001 unique symbols at a time (on average) 2 mils per share

**\*\*Criteria**

- ~~On a per symbol basis, orders~~Orders must be ~~95% marketable where marketable means:~~ (1) ~~for the Midpoint Discrete Matching Process orders~~ priced at NBBO midpoint or more aggressive than the NBBO midpoint for the Midpoint book and (2) ~~priced the Discrete Bid/Offer Matching Process Fee/Fee buy orders priced at or more aggressive than the NBB or above and sell orders at NBBO for the NBO or below ASPEN Fee/Fee book.~~
- IntelligentCross will monitor open orders every few minutes to calculate the average unique symbols in the book on a daily basis.
- ~~Have a~~ minimum allow execution quantity (“MinQty tag) of”) ~~present, must be~~ less than or equal to 100 shares.
- ~~Have a maximum allow execution quantity (MaxQty tag) of greater than or equal to 100 shares.~~
- Not be an IOC Order.
- Rate will be calculated retroactively on all shares traded for that calendar month ~~and will be rounded down.~~
- If a Subscriber is live for a symbol in both ~~the Midpoint Discrete Matching Process and the Discrete Bid/Offer Matching Process~~ASPEN Fee/Fee, it will count twice for purposes of qualifying for the Active Order Incentive.

Trading in ~~the Discrete Bid/Offer Matching Process~~ASPEN Maker/Taker and ~~Discrete Bid/Offer Matching Process~~ASPEN Taker/Maker will not be taken into account for purposes of qualifying for the Subscriber Fee Discount. If a Subscriber qualifies for a Subscriber Fee Discount, the pricing will apply to their trading activity in both the Midpoint ~~Discrete Matching Process~~book and ~~the Discrete Bid/Offer Matching Process~~ASPEN Fee/Fee book. The ATS can offer the Subscriber Fee Discount to allow new Subscribers to receive the Subscriber Fee Discount and pay the lowest fee charged to any existing Subscriber based on the above criteria for up to three months.

Item 21: Trade Reporting

- a. Explain any procedures and material arrangements for reporting transactions on the NMS Stock ATS, including where an ATS reports transactions and under what circumstances.

**Answer:** Once an execution occurs, the ATS will send electronic messages containing execution reports to the originators of the order as well as the NYSENasdaq Trade Reporting Facility. The NasdaqNYSE Trade Reporting Facility is used as a back-up.

- b. Are the procedures and material arrangements for reporting transactions on the NMS Stock ATS the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 22: Clearance and Settlement

- a. Describe any procedures and material arrangements undertaken to facilitate the clearance and settlement of transactions on the NMS Stock ATS (e.g., whether the ATS becomes a counterparty, whether it submits trades to a registered clearing agency, or whether it requires Subscribers to have arrangements with a clearing firm).

**Answer:** IntelligentCross has an agreement with Instinet, LLC, a member of the National Securities Clearing Corporation, to act on behalf of IntelligentCross to clear and settle all transactions executed on the ATS, and Instinet submits the ATS'sATS' executions to NSCC for clearing and to DTC for settling. All Subscribers must have clearing brokers that are NSCC/DTC members. IntelligentCross is a counterparty to all trades on the ATS and Subscribers know only that IntelligentCross was the counterparty to their trade.

- b. Are the procedures and material arrangements undertaken to facilitate the clearance and settlement of transactions on the NMS Stock ATS the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.

Item 23: Market Data

- a. Identify the sources of market data used by the NMS Stock ATS (e.g., proprietary feed from a national securities exchange, feed from the securities information processor ("SIP")), and how the ATS uses market data from these sources to provide the services that it offers, including how the ATS uses market data to determine the NBBO and protected quotes, and display, price, prioritize, execute, and remove orders and trading interest on the ATS.

The ATS uses a combination of SIP and direct feeds to determine the NBBO and to price executions. If direct feeds are available and utilized by the ATS, they will be used to price the NBBO. If a direct feed that the ATS ~~receives~~utilizes is deemed not reliable, it will use the SIP price from that exchange. The ATS utilizes the direct feeds from the following exchanges:

- CBOE BZX; CBOE BYX; CBOE EDGX; CBOE EDGA
- NYSE; NYSE Arca
- Nasdaq; Nasdaq BX; Nasdaq PSX
- IEX
- MEMX

b. Are the sources of market data and how the NMS Stock ATS uses market data for the services that it offers the same for all Subscribers and the Broker-Dealer Operator?

Yes  No

If no, identify and explain any differences.